TEE CALCULATION

Any additional fee required has been calculated as follows:

	Claims Remaining Alter Antendment	Highest Number Previously Paid	Numbert Extra Claims Present	Rate	Additional
Total	- H	= 35 ==		X 52,00	
		=: 8** =			
Total Independent First presentat	ión of Maltiple	€ 8•+ =	Claim(s) (i	X 220.00	
		e con in a		TOTAL	=

not less than 20

No additional fee is required.

In the event a fee is required or if any additional fee during the prosecution of this application is not paid; the Patent Office is authorized to charge any undergayment or credit any overpayment to Deposit Account No. 50-2245.

CONTINGENT EXTENSION REQUEST

If this communication is filed after the shortened statutory time period had elapsed and no separate Petition is enclosed, the Commissioner of Patents and Trademarks is petitioned, under 37 CPR 1.136(a), to extend the time for filing a response to the outstanding Office Action by the number of months which will avoid abandonment under 37 CPR-1.135. The fee under 37 CPR-1.135 should be charged to our Deposit Account No. 50 2215.

not less than 3

LISTING OF THE CLAIMS

1. (Previously Presented) An intermediate device adapted to be provided between a first information processing device for providing an information processing service through a network and a second information processing device for receiving said information processing service, providing an intermediate service additional to said information processing service; said information processing service; said information processing service; said

a state information acquirer that acquires state information required to institute the state of an existing session established between said first information processing device and said second information processing device for said information processing service by actively requesting and obtaining said state information from said first information processing device or said second information processing device;

an intermediate service manager that manages, based on said state information, transferrules for applying said intermediate service to data of said information processing service which is sent and received between said first information processing device and said second information processing device, and transferring the data of said information processing service to which said intermediate service is applied; and

intermediate device and said second information processing device; establishing a new session between said intermediate device and said first information processing device, and transferring said data of said information processing service using said existing session and said new session, according to said transfer rules:

2. (Previously Presented) An intermediate device according to claim 4, wherein said state information acquires has a session monitor that acquires session information inherential said session sent and received between said first information processing device and said second information processing device as part of said state information.

- 3. (Previously Presented) An intermediate device according to claim 1, wherein said state information acquires has an information collector that acquires service inherent information inherent in said information processing service as part of said state information by inquiring at said first information processing device or said second information processing device.
- 4. (Previously Presented) An intermediate device according to claim 3, wherein said state information acquirer inquires at said first information processing device or said second information processing device about accessing object identifying information assigned to identify respective accessing objects on said first information processing device, with respect to a plurality of said accessing objects, and extracts a regularity common to a plurality of obtained items of said accessing object identifying information, acquiring, as part of said service inherent information, a device identifier that identifies said first information processing device having said accessing objects.
- So (Previously Presented). An intermediate device according to claim 1, wherein said transfer controller has an operation mode for transferring data of the existing session between said liest information processing device and said second information processing device without the data of the information processing service being subjected to said intermediate service, and an operation mode that establishes sessions between the intermediate device and both said second information processing device and said first information processing device when a new requested session of said information processing service is requested to be established by said second information processing device, applying said intermediate service to the data of said information processing service using said sessions, and transferring said data of said information processing service using said sessions, and transferring said data of said information processing service.
- 6. (Previously Presented) An intermediate device according to claim 1, wherein said state information acquirer has a cancellation controller that issues a command for temporarily mullifying and reestablishing said session to said first information processing device and said second information processing device; and acquires said state information in a process of recomblishing the session according to said command.

- 7. (Previously Presented) An intermediate device according to claim I, wherein said intermediate service has contents registered in advance by an operator.
- 8. (Original) An intermediate device according to claim 7, wherein said information processing service comprises a service for allowing said second information processing device to access a resource on said first information processing device, and said intermediate service comprises a service for changing the access from said second information processing device to the resource on said first information processing device to convert an access destination.
- 9. (Original) An intermediate device according to claim 7, wherein said information processing service comprises a service for allowing said second information processing device to access a WEB page on said first information processing device, and said intermediate service comprises a service for integrating said information processing services provided by a plurality of said first information processing devices and providing the integrated information processing services to said second information processing device.
- 10. (Previously Presented) An intermediate device according to claim it, wherein when said intermediate service ends being provided, said transfer controller:

when requested to newly establish a session of said information processing service from said second information processing device, transfers the data of said information processing service; between said second information processing device; and said first information processing device; establishing a session directly between said first information processing device and said second information processing device while exempting the data from said intermediate service; and

with respect to said information processing service which has already been provided, continuously transfers the data of said information processing service to which said information processing device and a service is applied using a session between itself and said first information processing device; antil said second information processing device; antil said second information processing device ends employing said information processing services

El. (Previously Presented) A service providing incthed of providing an intermediate service additional to an information processing service with an intermediate device which is provided between a first information processing device for providing said information processing service through a network and a second information processing device receiving said information processing service, comprising

the first step of controlling said intermediate device provided between said first information processing device and said second information processing device to acquire state information required to maintain the state of an existing session established between said first information processing device and said second information processing device for said information processing service by actively requesting and obtaining said state information from said first information processing device or said second information processing device:

the second step of controlling said intermediate device to generate, based on said state information, transfer rules for applying said intermediate service to data of said information processing service which is sent and received between said first information processing device and said second information processing device, and transferring the data of said information processing service to which said intermediate service is applied; and

the third step of controlling said intermediate device to maintain the state of said existing session between said intermediate device and said second information processing device; establish; a new session between said intermediate device and said first information processing device; and transfer said data of said information processing service asing said existing session and said new session, according to said transfer rules.

12. (Original) A service providing method according to claim 11, wherein in said first step, said intermediate device acquires session information inherent in said session sent and received between said first information processing device and said second information processing device; as part of said state information.

- 13. (Original) A service providing method according to claim 11, wherein in said first step, said intermediate device acquires service inherent information inherent in said information processing service as part of said state information by inquiring at said first information processing device or said second information processing device.
- 14. (Original) A service providing method according to claim 13, wherein said intermediate device inquires at said first information processing device or said second information processing device about accessing objects identifying information assigned to identify respective accessing objects on said first information processing device, with respect to a plurality of said accessing objects, and extracts a regularity common to a plurality of obtained items of said accessing object identifying information, thereby acquiring as part of said service inherent information, a device identifier for identifying said first information processing device having said accessing objects.
- in said first step, when all said state information which is required cannot be bequired, said intermediate device transfers data of the existing session between said first information processing device and said second information processing device without the data of said information processing service being subjected to said intermediate service, and when a new requested session of said information processing service is requested to be established by said second information processing device, said intermediate device establishes sessions between the intermediate device and both said second information processing device; applies said intermediate service to the data of said information processing service using said seconds and transfers said data of said information processing service.
- 16. (Original) A service providing method according to claim 11, wherein in said first step, said intermediate device issues a command for temporarily millifying and reestablishing said session to said first information processing device and said second information processing device; and acquires said state information in a process of reestablishing the session.

- 17. (Previously Presented) A service providing method according to claim 11, wherein suid intermediate service has contents registered in advance in said intermediate device by an operator.
- 18. (Original) A service providing method according to claim 17, wherein said information processing service comprises a service for allowing said second information processing device, and said intermediate service comprises a service for clianging the access from said second information processing device to the resource on said first information processing device to convert an access destination.
- 19. (Original) A service providing method according to claim 17, wherein said information processing service comprises a service for allowing said second information processing device, and said intermediate service comprises a service for integrating said information processing services provided by a plurality of said first information processing devices and providing the integrated information processing services to said second information processing device.
- 20. (Previously Presented) A service providing method according to claim 11, further comprising:

the fourth step of when said intermediate service ends being provided and when requested to newly establish a session of said information processing service from said second information processing device, transferring the data of said information processing service between said second information processing device, thereby establishing a session directly between said first information processing device and said first information processing device and said second information processing device while exempting the data from said intermediate service; and

the fifth step of with respect to said information processing service which has already been provided, continuously transferring the data of said information processing service to which said intermediate service is applied using a session between said intermediate device and said first information processing device and a session between said intermediate device and said second.

information processing device, until said second information processing device ends employing said information processing service.

- 21. (Previously Presented) A service providing program stored on a computer-readable media for providing an intermediate service additional to an information processing service executed by a computer on an intermediate device which is provided between a first information processing device for providing said information processing service through a network and a second information processing device receiving said information processing service, said program cambling said computer to perform:
- a first process of controlling state information acquires to acquire state information required to maintain the state of an existing session established between said first information processing device and said second information processing device for said information processing service by actively requesting and obtaining said state information from said first information processing device or said second information processing device;
- n second process of controlling intermediate service manager to generate, based on said state information, transfer rules for applying said intermediate service to data of said information processing service which is sent and received between said first information processing device and said second information processing device, and transfer the data of said information processing service to which said informediate service is applied; and
- a third process of controlling transfer controller to maintain the state of said existing session between said intermediate device and said second information processing device, establish a new session between said intermediate device and said first information processing device, and transfer said data of said information processing service using said existing session and said new session, according to said transfer rules.
- 22. (Original) A service providing program according to claim 21, wherein in said first process, session information inherent in said session sent and received between said first

information processing device and said second information processing device is acquired as part of said state information.

- 23. (Original) A service providing program according to claim 21, wherein in said first process, service inherent information inherent in said information processing service is acquired as part of said state information by inquiring at said first information processing device or said second information processing device.
- 24. (Original) A service providing program according to claim-23, wherein said first information processing device or said second information processing device are inquired at about accessing object identifying information assigned to identify respective accessing objects on said first information processing device, with respect to a plurality of said accessing objects, and a regularity common to a plurality of obtained items of said accessing object identifying information are extracted, thereby acquiring as part of said service inherent information, a device identifier for identifying said first information processing device having said accessing objects:
- in said first process, when all said state information which is required cannot be acquired, said transfer controller transfers data of the existing session between said first information processing device and said second information processing device without the data of said information processing service being subjected to said information encessing service being subjected to said information processing service is requested to be established by said second information processing device, said transfer controller ostablishes sessions between the transfer controller and both said second information processing device and gaid first information processing device, applies said intermediate service to the data of said information processing service using said sessions, and transfers said data of said information processing service.
- 26. (Previously Presented) A service providing program according to claim 21, wherein in said first process, cancellation controller issues a command for temporarily multifying and reestablishing said session to said first information processing device and said second information

processing device; and said state information acquirer acquires said state information in a process of reestablishing the session.

- 27. (Previously Presented) A service providing program according to claim 21, wherein suid intermediate service has contents registered in advance in said intermediate device by an operator.
- 28. (Original) A service providing program according to claim 27, wherein said information processing service comprises a service for allowing said second information processing device to access a resource on said first information processing device, and said intermediate scretce comprises a service for changing the access from said second information processing device to the resource on said first information processing device to convert an access destination.
- 29. (Original) A service providing program according to claim 27, wherein said information processing service comprises a service for allowing said second information processing device; and said intermediate service comprises a service for integrating said information processing services provided by a plurality of said first information processing devices and providing the integrated information processing services to said second information processing device.
- 30, (Previously Presented) A service providing program according to claim 21, further comprising:
- a fourth process of, when said intermediate service ends being provided and when requested to newly establish a session of said information processing service from said second information processing device, controlling said transfer controller to transfer the data of said information processing device and said first information processing device and said first information processing device, establishing a session directly between said-first information processing device and said second information processing device and said second information processing device and said second information processing device while exempting the data from said intermediate service; and

been provided, controlling said transfer controller to continuously transfer the data of said information processing service to which said intermediate service is applied using a session between itself and said lifts information processing device and a session between itself and said second information processing device, until said second information processing device, until said second information processing service.

Breviously Presented) A service providing program stored on a computer-readable media for being executed by a computer on an intermediate device to provide an intermediate service additional to an information processing service between a first information processing device for providing said information processing service through a network and a second information processing device receiving said information processing service, said program enabling said computer to perform:

a first process of acquiring state information required to maintain the state of an existing session established between said first information processing device and said second information processing device for said information processing service by actively requesting and obtaining said state information from said first information processing device or said second information processing device;

a second process of generating, based on said state information, transfer rules for applying said intermediate service to data of said information processing service which is sent and received between said first information processing device and said second information processing device; and transferring the data of said information processing service to which said intermediate service is applied;

athird process of maintaining the state of said existing session between said intermediate device and said second information processing device, establishing a new session between said intermediate device and said first information processing device; and transferring said data of said

information processing service using said existing session and said new session, according to said transfer rules:

32. (Previously Presented) An intermediate device adapted to be provided between a first information processing device for providing an information processing service through a network and a second information processing device for receiving said information processing service; said service, providing an intermediate service additional to said information processing service; said intermediate device comprising:

state information acquiring means for acquiring state information required to maintain the state of an existing session established between said first information processing device and said second information processing device for said information processing service by actively requesting and obtaining said state information from said first information processing device of said second information processing device:

intermediate service managing means for generating, based on said state information; transfer rules for applying said intermediate service to data of said information processing service which is sent and received between said first information processing device and said second information processing device, and transferring the data of said information processing service to which said intermediate service is applied; and

transfer control means for maintaining the state of said existing session between said intermediate device and said second information processing device, establishing a new session between said intermediate device and said first information processing device, and transferring said data of said information processing service using said existing session and said new session, according to said transfer rules:

33. (Previously Presented) A service providing method of providing an intermediate service additional to an information processing service with an intermediate device which is provided between a first information processing device for providing said information processing

service through a network and a second information processing device receiving said information processing service comprising

the first step of controlling said intermediate device provided between said first information processing device and said second information processing device to acquire state information required to maintain the state of an existing session established between said first information processing device and said second information processing device for said information processing service by actively requesting and obtaining said state information from said first information processing device;

the second step of controlling said intermediate device to generate, based on said state information, transfer rules for applying said intermediate service to data of said information processing service which is sent and received between said first information processing device and said second information processing device, and transforring the data of said information processing service to which said intermediate service is applied; and

the third step of controlling said intermediate device to maintain the state of said existing session between said intermediate device and said second information processing device establish a new session between said intermediate device and said first information processing device; and transfer said data of said information processing service using said existing session and said new session, according to said transfer rules.

34. (Previously Presented) Asservice providing program stored on a computer-readable, media for providing an intermediate service additional to an information processing service executed by a computer on an intermediate device which is provided between a first information processing device for providing said information processing service through a network and a second information processing device receiving said information processing service, said program enabling said computer to perform:

a first process of controlling state information acquiring means to acquire state information required to maintain the state of an existing session established between said first

Information processing device and said second information processing device for said information processing service by actively requesting and obtaining said state information from said lifest information processing device or said second information processing device:

a second process of controlling intermediate service managing means to generate, based on said state information, transfer rules for applying said intermediate service to data of said information processing service which is sent and received between said first information processing device and transfer the data of said information processing service to which said intermediate service is applied; and

athird process of controlling transfer control means to maintain the state of said existing session between said intermediate device and said second information processing device, establish a new session between said intermediate device and said first information processing device, and transfer said data of said information processing service using said existing session and said new session according to said transfer rules.

35. (Previously Presented) A service providing program stored on a computer-rendable media for being executed by a computer on an intermediate device to provide an information processing service between a first information processing device for providing said information processing service through a network and a second information processing clevice receiving said information processing service, said program enabling said computer to perform:

a first process of acquiring state information required to maintain the state of an existing session established between said first information processing device and said second information processing device for said information processing service by actively requesting and obtaining said state information from said first information processing device or said second information processing device:

a second process of generating, based on said state information, transfer rules for applying said intermediate service to data of said information processing service which is sent and

received between said first information processing device and said second information processing device, and transferring the data of said information processing service to which said intermediate service is applied:

the third process of maintaining the state of said existing session between said intermediate device and said second information processing device, establishing a new session between said intermediate device and said first information processing device; and transferring said data of said information processing service using said existing session and said new session, according to said transferrings.